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Descriptors-*Educational Programs, *Educational Researchers, *Higher Education, Motivation, *Research Skills, Trainees, *Undergraduate Study, Work Experience Programs

Identifiers-*Appalachia

This program aimed generally to identify the potential educational researcher early in his undergraduate program, guide him toward courses that would prepare him for conducting research, and provide the opportunity for individual and small group participation in meaningful research activities. Another objective was to begin a systematic study of learning problems associated with Appalachia. The training program was built around special area projects and individual investigation focusing on area interests of curriculum, human growth and development, psychology, and reading. It also involved a "core project"--an attempt to establish a computer based reference system for classifying research related teaching problems associated with geographically isolated areas. During Spring 1966, 16 trainees were selected for the Summer session. They completed the program at the end of Spring semester 1967 when a group of 10 trainees began the 2nd year long project. Motivating the trainees became the primary function of the program. And through close personal contact, small informal classes, involvement in ongoing research, and the clarification of realistic goals, the trainees' sophistication and enthusiasm for educational research was greatly enhanced. Appendices include student evaluations of the program and professional publications and presentations. (JS)

BR 62-1984

PA 24
OE-AR

Final Report on: The Undergraduate Research Training Program

O.E. Grant No.: OEG 2 - 6 - 061984 - 3150

At: Eastern Kentucky University, Richmond, Kentucky 40475

Dates: June 1966
(from)

June 1968
(to)

Submitted by: Newell T. Gill, Director

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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I
REVIEW AND EVALUATION
OF
PROGRAM

The state colleges in Kentucky have been handicapped in past years by the lack of funds for supporting educational research. This fiscal problem is not only reflected by the quantity and quality of research produced in the state but also by the relatively heavy teaching load of the faculties. Now that human resources are being re-assigned, physical facilities increased, and a need to improve educational practices through research has become more of a desire, Kentucky finds itself to be most inadequate in the number of people qualified and oriented toward educational research. Since the signing of the Elementary and Secondary Act of 1965, many of Kentucky's administrators are applying for funds to improve instruction in their school systems. Most of these systems are in need of persons oriented in educational research to aid them in the evaluation of their new programs. There does not seem, however, to be a sufficient supply of qualified researchers to meet these needs.

Attracting trainees to enter and persevere in research is not only a problem of skill development but also of motivation. The program as outlined in this final report attempted to identify the potential researcher early in his undergraduate program, guide him toward courses that would prepare him for conducting research, provide individual and small group participation in experiences that develop many of the needed skills, and provide opportunities for him to be active in research projects.

OBJECTIVES OF THE PROGRAM

1. To identify the potential educational researcher early in his undergraduate academic program.
2. To guide the potential researcher to select elective courses that would prepare him to pursue an intensive research orientation program toward the end of his program.
3. To provide seminars and other learning experiences to acquaint him with the basic fundamentals of educational research.
4. To teach him to organize, collect, categorize and classify research studies concerned with learning in isolated communities.
5. To involve the student in both individual and group research projects of various modes of design and several stages of progress.
6. To encourage the undergraduate to continue to be active in educational research after graduation.
7. To encourage him to continue in more advanced stages of educational research after graduation.
8. To begin a systematic study of learning problems associated with the Appalachian area.

SUMMARY OF EDUCATIONAL RESEARCH TRAINING PROGRAM

The program's training function was oriented around special area projects, individual investigation, and a "core project". The "core project" was an attempt to establish a computer based reference system for the classification of educational research related to teaching problems concerned with geographically isolated areas. The special area projects and individual investigation focused on area interest: 1) curriculum 2) human growth and development, 3) psychology and 4) reading.

ACADEMIC COURSE

"Fundamentals of Educational Research I and II" (Edu. 507).

Textbooks: Statistical Concepts by McCollough and Van Atta;
and Essentials of Educational Research by Good
(Summer 1966).

Statistics in Psychology and Education by Garrett
(Spring 1967).

Psychological Statistics: an Introduction by Courts;
and Essentials of Educational Research by Good
(Summer 1967 and Spring 1968).

The students gained considerable knowledge of statistics and research from this course. Many students felt that the pace was too fast, thus the second part of the course devoted more time to problem solving and practicum experiences with statistics and experimental design.

PROBLEMS COURSE

"Special Area Study I and II" (Edu. 507A).

Reading: The trainees worked with the professor on a study of the relationship between reading levels and college point averages and did extensive reading of research articles concerned with reading and the disadvantaged student. During the spring semester, 1967, students assisted in research concerned with ESIA - Title I reading programs in Kentucky in cooperation with ESIA - Title IV and CENREL.

Curriculum: This research area undertook an analysis of factors which affect the making of curricula in approximately twenty-five public high schools in selected Eastern Kentucky counties. Included in this area of investigation are the form and content of curricula, courses of study, elective systems, vocational curricula, co-curricular activities, student activities, and those forces which shape the curriculum such as boards of education, administrators, teachers, pupils parents, and local businesses.

Child Development: Investigation was conducted in the area of perceptual development with emphasis upon the self-image and its affect upon the development and education of the young child (Appendix B).

Psychology: An evaluation of the effect of the Montessori approach to the pre-school learning experience for both culturally privileged and deprived children was undertaken. Observations were made on children in two Montessori classes in September, 1966, in Lexington, Kentucky. The teachers for these classes were completing work for the masters degree with specialization in Montessori methods at Xavier University. Trainee participation in the project provided a meaningful introduction to practice and application of psychological research in general as well as in interdisciplinary research, in this case Education and Psychology. The students made the following kinds of observations: (1) social, motor and intellectual development, (2) time sampling of behavior in the classroom, and (3) activity preferences.

CORE PROJECT

The purpose of the "core project" was to develop a computer based reference system for the classification of educational research related to teaching problems in geographically isolated areas. Trainees classified and abstracted research studies in their special areas, learned to operate data processing machines, and devised possible coding systems.

TOTAL PROGRAM SCHEDULE

Spring Semester 1966

Selection of first group of trainees (16). No support requested.

Summer Session 1966

Fundamentals of Educational Research I (Edu. 507), 3 credit hours;
Special Area Study I (Edu. 507A), 3 credit hours; and
approximately 10 hours on group research and the "core project".

Fall Semester 1966

Student teaching and search for a research problem to be
undertaken individually the following spring. No support
requested.

Spring Semester 1967

Fundamentals of Educational Research II (Edu. 507), 3 credit
hours; Special Area Study II (Edu. 507A), 3 credit hours; and
approximately 10 hours on group research and "core project".

Selection of the second group of trainees.

The end of this semester terminated the program for the first
group.

Summer Session 1967

Fundamentals of Educational Research I (Edu. 507), 3 credit hours;
Special Area Study I (Edu. 507A), 3 credit hours, and
approximately 10 hours on group research and the "core project".

Fall Semester 1967

Student teaching and search for a research problem to be
undertaken individually in the following spring. No support
requested.

Spring Semester 1968

Fundamentals of Educational Research II (Edu. 507), 3 credit hours; Special Area Study II (Edu. 507A), 3 credit hours; and approximately 10 hours on group research and "core project". The end of this semester terminated the program for the second group.

Summer Session 1968

Evaluation of program.

T R A I N E E S

The first year sixteen participants were involved in the training program. This number of participants was felt to be ideal as it would allow for more individual attention, i.e. a maximum of four students working in any one area of specialization.

The continuation of the program provided for 12 new trainees. Unfortunately, the staff was only able to enlist 10 qualified students. The most popular explanation was the proximity to which most students at this stage had completed their degree requirements. Few juniors or seniors at this institution have the time or electives available for participating in any new programs.

The trainees participated in the basic courses as a group, but worked individually or in groups of four for the core project, and individually or in pairs on the special research projects (Appendix A).

The trainees were selected during the Spring semester 1966 and 1967 by the research committee using the following set of criteria:

- (1) cumulative overall grade point average of 2.5 or above and at least a grade point average of 3.0 in the major field. (Eastern employs a 4.0 system.)
- (2) scores in the upper quartile on the SCAT on both total and mathematics sections.
- (3) show interest in their special areas as indicated by their participation in the professional student organizations.
- (4) complete the required courses as stated in the program outline.
- (5) plan to make education a career after graduation.
- (6) be approved by the professor coordinating the special area in which the student would be working.
- (7) complete a total of forty-eight semester credit hours by the end of the semester during which they are being considered.

The criterion for G.P.A. in the selection of the second group of trainees was raised from 2.5 to 3.0 (over-all).

ROSTER OF TRAINEES FOR SUMMER 1966

NAME: Brewer, Martha L.
AGE: 20
SEX: Female
MARITAL STATUS: Married

CLASSIFICATION: Senior
TOTAL HOURS: 100
NO. HOURS IN MAJOR: 26
ACADEMIC HONORS: Brockton
Town Council; SNEA

SCAT SCORE: V-96 Q-90
GRADE PT. STANDING: 2.9
MAJOR: Secondary
Teaching

NAME: Dunavan, Suzanne
AGE: 20
SEX: Female
MARITAL STATUS: Single

CLASSIFICATION: Senior
TOTAL HOURS: 117½
NO. HOURS IN MAJOR: 26
ACADEMIC HONORS: SNEA

SCAT SCORE: V-37 Q-39
GRADE PT. STANDING: 2.9
MAJOR: Secondary
Teaching

NAME: Fackert, Nina Frances
AGE: 20
SEX: Female
MARITAL STATUS: Single

CLASSIFICATION: Junior
TOTAL HOURS: 102
NO. HOURS IN MAJOR: 19
ACADEMIC HONORS: SNEA

SCAT SCORE: V-37 Q-60
GRADE PT. STANDING: 2.9
MAJOR: Elementary Ed.

NAME: Hashem, Eugene T.
AGE: 31
SEX: Male
MARITAL STATUS: Married

CLASSIFICATION: Senior
TOTAL HOURS: 104
NO. HOURS IN MAJOR: 24
ACADEMIC HONORS: Deans
List entire time at
Eastern

SCAT SCORE: V-93 Q-90
GRADE PT. STANDING: 3.0
MAJOR: Elementary Ed.

NAME: Hill, Richard L.
AGE: 20
SEX: Male
MARITAL STATUS: Single

CLASSIFICATION: Senior
TOTAL HOURS: 99
NO. HOURS IN MAJOR: 17
ACADEMIC HONORS: None

SCAT SCORE: V-68 Q-84
GRADE PT. STANDING: 2.8
MAJOR: Secondary
Teaching

NAME: Kidd, Hildreth C.
AGE: 46
SEX: Female
MARITAL STATUS: Married

CLASSIFICATION: Senior
TOTAL HOURS: 138
NO. HOURS IN MAJOR: 29
ACADEMIC HONORS: None

SCAT SCORE: V-92 Q-48
GRADE PT. STANDING: 3.6
MAJOR: Secondary
Teaching

NAME: Lough, Linda Raye
AGE: 21
SEX: Female
MARITAL STATUS: Single

CLASSIFICATION: Senior
TOTAL HOURS: 102
NO. HOURS IN MAJOR: 36
ACADEMIC HONORS: Deans
List

SCAT SCORE: V-92 Q-27
GRADE PT. STANDING: 3.0
MAJOR: Home Economics

NAME: Munson, Jane E.
AGE: 20
SEX: Female
MARITAL STATUS: Single

CLASSIFICATION: Senior
TOTAL HOURS: 110
NO. HOURS IN MAJOR: 30
ACADEMIC HONORS: Kappa
Delta Pi

SCAT SCORE: V-48 Q-27
GRADE PT. STANDING: 3.4
MAJOR: Secondary
Teaching

NAME: Northern, Daphne L.
AGE: 39
SEX: Female
MARITAL STATUS: Married

CLASSIFICATION: Senior
TOTAL HOURS: 99
NO. HOURS IN MAJOR: 55
ACADEMIC HONORS: Deans
List

SCAT SCORE: V-89 Q-80
GRADE PT. STANDING: 3.3
MAJOR: History
Government

NAME: Pagano, Barbara S. AGE: 20 SEX: Female MARITAL STATUS: Married	CLASSIFICATION: Senior TOTAL HOURS: 97 NO. HOURS IN MAJOR: 26 ACADEMIC HONORS: National Honor Society Senior Year in High School	SCAT SCORE: V-50 Q-80 GRADE PT. STANDING: 3.3 MAJOR: Elementary Ed.
NAME: Pierce, Helen U. AGE: 29 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Junior TOTAL HOURS: 86 NO. HOURS IN MAJOR: 24 ACADEMIC HONORS: Kappa Delta Pi	SCAT SCORE: V-24 Q-20 GRADE PT. STANDING: 3.5 MAJOR: Elementary Ed.
NAME: Scarfone, Anthony D. AGE: 23 SEX: Male MARITAL STATUS: Single	CLASSIFICATION: Junior TOTAL HOURS: 118 NO. HOURS IN MAJOR: 20 ACADEMIC HONORS: Kappa Delta Pi; OAKS.	SCAT SCORE: V-62 Q-80 GRADE PT. STANDING: 3.5 MAJOR: Elementary Ed.
* NAME: Sears, Judy AGE: 22 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Junior TOTAL HOURS: 96 NO. HOURS IN MAJOR: 43 ACADEMIC HONORS: Home Ec. Club; YWCA	SCAT SCORE: V-32 Q-45 GRADE PT. STANDING: 2.9 MAJOR: Secondary Teaching
NAME: Smith, Pamela J. AGE: 19 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 108 NO. HOURS IN MAJOR: 21 ACADEMIC HONORS: None	SCAT SCORE: V-96 Q-90 GRADE PT. STANDING: 3.2 MAJOR: Secondary Teaching
NAME: Witt, Patricia J. AGE: 21 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 111 NO. HOURS IN MAJOR: 36 ACADEMIC HONORS: Kappi Pi	SCAT SCORE: V-55 Q-27 GRADE PT. STANDING: 3.2 MAJOR: Secondary Ed.
NAME: Witten, Sherryn L. AGE: 21 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 105 NO. HOURS IN MAJOR: 28 ACADEMIC HONORS: CWENS; Kappa Delta Pi; Collegiate Pentacle	SCAT SCORE: V-96 Q-98 GRADE PT. STANDING: 3.4 MAJOR: Elementary Ed.

* Trainee did not participate during the Spring 1967.

ROSTER OF TRAINEES FOR SUMMER 1967

NAME: Barker, Carrie Ann AGE: 20 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 123 NO. HOURS IN MAJOR: 32 ACADEMIC HONORS: Deans List	GRADE PT. STANDING: 3.0 MAJOR: English
* NAME: Burness, Billy Jo AGE: 20 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 115 NO. HOURS IN MAJOR: 22 ACADEMIC HONORS: Kappa Delta Tau	GRADE PT. STANDING: 3.0 MAJOR: Elementary Ed.
NAME: Dunbar, Carolyn S. AGE: 22 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Junior TOTAL HOURS: 83 NO. HOURS IN MAJOR: 18 ACADEMIC HONORS: Deans List all semesters	GRADE PT. STANDING: 3.1 MAJOR: English
NAME: Hamilton, Judith AGE: 20 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 111 HOURS IN MAJOR: 39 ACADEMIC HONORS: Deans List	GRADE PT. STANDING: 3.1 MAJOR: Elementary Ed.
NAME: Herdtner, Thomas J. AGE: 20 SEX: Male MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 102 HOURS IN MAJOR: 83 $\frac{1}{4}$ ACADEMIC HONORS: SNEA	GRADE PT. STANDING: 3.2 MAJOR: Elementary Edu.
NAME: King, Roy AGE: 26 SEX: Male MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 114 HOURS IN MAJOR: 26 ACADEMIC HONORS: Alpha Sigma Epsilon	GRADE PT. STANDING: 3.1 MAJOR: Psychology
NAME: Lawson, Karen Sue AGE: 21 SEX: Female MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 92 HOURS IN MAJOR: 32 ACADEMIC HONORS: None	GRADE PT. STANDING: 3.2 MAJOR: Elementary Ed.
NAME: Moesker, Joseph A. AGE: 21 SEX: Male MARITAL STATUS: Single	CLASSIFICATION: Senior TOTAL HOURS: 96 NO. HOURS IN MAJOR: 21 ACADEMIC HONORS: None	GRADE PT. STANDING: 3.0 MAJOR: English

* Trainee did not participate during the Spring 1968.

NAME: Spurr, Rebecca Lee
AGE: 20
SEX: Female
MARITAL STATUS: Single

CLASSIFICATION: Senior
TOTAL HOURS: 113
NO. HOURS IN MAJOR: 13
ACADEMIC HONORS: Kappa
Delta Pi

GRADE PT. STANDING: 3.0
MAJOR: Elementary Ed.

NAME: Wilburn, Ronnie G.
AGE: 25
SEX: Male
MARITAL STATUS: Divorced

CLASSIFICATION: Senior
TOTAL HOURS: 99
NO. HOURS IN MAJOR: 27
ACADEMIC HONORS: None

GRADE PT. STANDING: 3.0
MAJOR: Psychology

STATEMENT OF ACCOMPLISHMENTS AND CONTRIBUTIONS OF PROGRAM

It was the general feeling of the staff and trainees that the concept of the Undergraduate Research Training Program was excellent. To be expected were certain elements of both surprise, success, and disappointment. It was this attitude of expectancy that encouraged both the staff and the trainees to interpret their new experience more in terms of total involvement in a new learning situation. Consequently, the participants were encouraged to express their opinions concerning the program in order to alleviate future problems and thus insure the realization of the program's objectives.

The primary purpose of the program as interpreted by the director was twofold in nature: motivation and enlightenment. It was felt that due to the short period of student involvement, the emphasis should be on the factor capable of the greatest contribution. A heavy concentration on motivation seemed logical. It was reasoned that there could be little hope for a student who was knowledgeable but unmotivated, whereas, if the reverse were true, with time a properly motivated student might be expected to achieve the knowledge on his own. Thus motivating the trainees in the direction of educational research became the primary function of the program.

It was the consensus of the staff that the professor's enthusiasm would be a significant factor. As many of the staff members were intimately involved in some type of research, this was not considered to be a problem.

To further enhance the trainees' motivation, it was decided that definite goals should be offered with clear understood paths leading to their achievement. A graduate fellowship extending to the doctorate was offered as a goal. To clarify it as a realistic goal, some eighty graduate research programs seeking candidates were reviewed for the trainees benefit. Aware of the possibility that the trainees may still have failed to identify with this image, the directors were contacted by mail (Appendix C). The trainees' names and addresses were included with the hope that some of the program directors would take the opportunity to write directly to the students. Fortunately this did occur (Appendix D). The enthusiasm of the trainees that followed was highly gratifying.

Another significant contributor to motivation was the research undertaken by the staff. Through involving students directly in the process of meaningful research, textbook statements and research lectures became foci for meaningful discussion. In some instances the professor-trainee research projects met fruition in the form of a paper presented at a professional meeting or an article in a professional publication (Appendix B). This, understandably, unequivocally communicated to all a sense of importance and realism concerning the program.

The trainees were scheduled for individual conferences each week to discuss problems of an academic or personal nature. It was the feeling of the staff that learning is an individual phenomenon and through proper manipulation of the environment the student will learn to the best of his ability provided he is not distracted by ambiguous and conflicting goals.

Therefore, getting to know each student personally was felt to be a very necessary objective. Although this was time consuming, it proved to be both enjoyable and worthwhile. The relationship between the staff and the trainees was, for the most part, positive and informal. (Appendix F). This relationship seemed to facilitate communications between those involved.

The disappointments in the program were few. The most obvious was the cut-back in financial support at the end of the first year. This necessitated a reduction in staff and planned activities i.e. outside lecturers, field trips, supplies etc.,. Consequently, the quality of the program suffered to some extent. The staff and trainees, despite this cut-back, expressed a very positive regard for most aspects of the program.

Unfortunately the "storage and retrieval project" (core) never really got off the ground. The staff felt that its' incorporation had been overly optimistic. Although it served as an excellent exercise in the beginning, it proved to be far too time consuming, costly, and in general, laborious a task for the purpose of this training program.

Another regrettable finding was discovered only after the trainees had completed the Graduate Records Examination. Although the students were enthusiastic and appeared to be highly motivated, many were unable to perform effectively on this instrument. Only in a few cases did our trainees meet the requirements of the average graduate research program. This obviously seems to have been an oversight in the selection criteria, however, considering the major population that Eastern Kentucky University draws from, it is doubtful under these circumstances if anything else could have been expected. Needless to say, this situation disappointed many enthusiastic trainees seriously considering graduate school.

Approximately, only 25% of the trainees did accept graduate financial assistance. This small percentage was only in part the result of the G.R.E., however. Apparently, the large proportion of female trainees was also a contributing factor. Although a number of the young ladies were quite capable, their initial interest in graduate school appeared to wane during the Spring Semester. Marriage and school teaching was the most popular explanation. Although this was quite disappointing, it was understandable.

In conclusion, it was the feeling of the staff that the program did achieve to some degree each of its objectives. Through close personal contact, small informal classes, involvement in on going research, and the clarification of realistic goals, the trainees sophistication and enthusiasm concerning educational research was greatly enhanced.

II
ACCOUNT OF FUNDS
RECEIVED
AND
EXPENDED

(Due to delay beyond my control, this
section will be sent under separate
cover from the office of Neil Donaldson,
Dean, Business Affairs.)

A P P E N D I C E S

A Through E

A P P E N D I X A

Listing of Trainees
Completed Research Projects
for
1966-67
and
1967-68

T R A I N E E S C O M P L E T E D

R E S E A R C H P R O J E C T S

1966-67

- Brewer, Martha The effect of security on selected variables related to perception, cognition, and academic achievement.
- Dunavan, Suzanne A descriptive study of the relationship between intelligence, self-concepts, and vocational aspirations, according to race, sex, and age -- pertaining to children from a low socio-economic background.
- Fackert, Nina A questionnaire study: what are the elementary guidance counselors of Kentucky doing for the retarded reading child and what can they do?
- Hashem, T. Eugene A comparison of scores from a non-reading group intelligence test and a group intelligence test as related to a reading achievement test.
- Hill, Richard L. Relationship of physical fitness to posture fitness.
- Kidd, Hildreth Christian A follow-up study of the graduates of Lee County High School, Beattyville, Kentucky, for the years 1961 through 1966, inclusive.
- Lough, Linda R. A study of the performance on the items of the frostig developmental test of visual perception test by children of different socio-economic status.
- Munson, Jane E. The relationship between the low reader's conceptual ability and his performance on the California test of mental maturity.
- Northern, Daphne L. An attitudinal study of students from public assistance income families and students from earned income families in Lee County, Kentucky public schools.
- Pagano, Barbara L. Are the best readers the best listeners?
- Pierce, Helen U. The relationship between the reader's attitude toward reading and reading level.
- Sears, Judy The effect of security on selected variables related to perception, cognition, and academic achievement.

- Scarfone, Anthony D. The effect of varying reading frequency upon reading achievement.
- Smith, Pamela J. A comparison of Montessori and non-Montessori pre-school training for auditory discrimination and general school readiness.
- Witten, Sherryn L. A descriptive study of race, sex, and age variables related to vocational choice, vocational attitudes, self concept, and intelligence, as found in children of low socio-economic backgrounds.
- Witt, Patricia J. A comparison of Montessori and non-Montessori pre-school training for visual and tactile perception.

T R A I N E E S C O M P L E T E D

R E S E A R C H P R O J E C T S

1967-68

Austin, Karen L. The relationship between personal worth, self-reliance and academic achievement.

Barker, Ann The effects of previous accomplishment on a subsequent task.

Burness, Billie Jo (Drop-out).

Dunbar, Carole The effects of previous accomplishment on a subsequent task.

Hanen, Judith The relationship between socio-economic status, interests, and reading achievement.

Herdtner, Thomas J. Selected perceptual and socio-economic variables, body-orientation instruction, and predicted academic success in young children.

King, Roy W. Perception of time as a function of anxiety.

Moesker, Joseph A. The effects of an electronic calculator on the attitudes and mathematical proficiency of sixth grade boys.

Spurr, Rebecca A study of visual discrimination, aural discrimination, and oral reading in Madison County, Kentucky.

Wilburn, Ron (Has not completed research).

A P P E N D I X B

Professional Presentations

And

Publications

THE EFFECT OF SECURITY ON SELECTED
VARIABLES RELATED TO PERCEPTION,
COGNITION, AND ACADEMIC ACHIEVEMENT

Newell T. Gill, Ed.D.
Assistant Professor of Educational Psychology
Eastern Kentucky University

Judy Sears
Undergraduate Research Trainee
Eastern Kentucky University

Barbara Witten
Undergraduate Research Trainee
Eastern Kentucky University

Linda Lough
Undergraduate Research Trainee
Eastern Kentucky University

Martha Brewer
Undergraduate Research Trainee
Eastern Kentucky University

Spring 1966

Presented at the Annual AERA Meeting
in New York, February 16-18, 1967

ABSTRACT

From reviewing various theories of psychology related to an individual's adjustment, his perceptual and cognitive style, and his effectiveness as a person, the question arose as to the effect security may have on the other three variables. To explore this problem 249 college students enrolled in a teacher education child study program were divided into three groups according to their performance on Maslow's S-I inventory. They were then administered Rokeach's Dogmatism Scale (Form E) and Thurstone's Closure Flexibility Scale. A complex analysis of variance (2x3) was employed to explore differences between the three groups and between sexes as to their performance on the cognitive and perceptual tasks and their grade point averages. No differences between sex were found on any of the three variables. Secure groups were less dogmatic than insecure groups. This was more true of females than males. No significant differences were discovered between groups on the perceptual task. Secure groups had a higher mean grade point average than insecure groups. An analysis of the results and their implications for educators is discussed.

THE EFFECTS OF A HELPING RELATIONSHIP EXPERIENCE
WITH CHILDREN ON STUDENTS IN TEACHER EDUCATION

Newell T. Gill, Ed.D.
Assistant Professor
Educational Psychology
Eastern Kentucky University

Roy King
Undergraduate Research Trainee
Eastern Kentucky University

Ron.G. Wilburn
Undergraduate Research Trainee
Eastern Kentucky University

Spring 1967

Presented at the Annual AERA Meeting
in Chicago, February 7-10, 1968

To be published as:

"A helping relationship in teacher education," The Journal
of Experimental Education, (In Press), 1968-69.

ABSTRACT

A review of the literature suggested a national concern regarding our educational system. Some seem to feel that the breakdown in teacher-pupil communications is at the root of the problem. Solutions point to a more meaningful teacher-education experience such as may be found in a "helping relationship" between a student and a child. The researcher felt such a life experience would have a greater impact in fostering and strengthening attitudes conducive to working with children than an academic experience. The purpose of this study was to explore means for more effectively sensitizing education students to children. It was felt that success in this area would enhance the student's ability to establish good rapport. The hypotheses tested were: 1) The involvement of a student with a child in a helping relationship will enhance the student's general feeling and sensitivity for children. 2) The involvement of a student with a child in in a helping relationship will enhance the student's feelings about himself. 3) The involvement of a student with a child in a helping relationship will significantly effect the dogmatism-liberal characteristics of his belief system. 4) Students involved in a helping relationship with Negro children will tend to view themselves and the Negro as being more alike than students not having tutored Negroes. 5) A student's performance on the Minnesota Teacher Attitude Inventory will be significantly effected by the degree to which he is: a) "dogmatic" and b) "secure".

The data for evaluating the hypotheses were collected from a sample of 82 junior and senior education students enrolled in a child study course at Eastern Kentucky University. Twenty-nine (29) students worked with one or more white children; nineteen (19) with one or more Negro children; and the remaining thirty-four (34) served as a control. The treatment lasted for approximately eight weeks. The groups were pre- and post- tested on selected personality variables felt to be necessary for the establishment of good rapport. The instruments used were: 1) Maslow's S-I Inventory; 2) Rokeach's Dogmatism Scale; 3) Bogardus Social Distance Scale; 4) A Trait Evaluation Scale; 5) The Minnesota¹ Teacher Attitude Inventory.

A complex analysis of variance between groups was the primary statistical method used in analyzing the data. Although the means were most often in the expected direction, only two F's were statistically significant. Females and "liberals" scored significantly higher on the MTAI than males or "traditionalists". The implications of these findings for teacher education were discussed. The failure to find evidence of any significant effect on the experimental groups was attributed to insufficient duration and intensity of the treatment.

¹ The MTAI was not available for pre-testing.

SELECTED PERCEPTUAL AND SOCIO-ECONOMIC
VARIABLES, BODY-ORIENTATION INSTRUCTION, AND
PREDICTED ACADEMIC SUCCESS IN YOUNG CHILDREN

Reuell T. Gill, Ed.D.
Assistant Professor
Educational Psychology
Eastern Kentucky University

Thomas J. Herdner
Undergraduate Research Trainee
Eastern Kentucky University

Linda Lough
Undergraduate Research Trainee
Eastern Kentucky University

Spring 1967

To be published in: Perceptual and Motor Skills, 1968, 26, 1175-1184.

ABSTRACT

The purpose of this study was to investigate the relationships between selected perceptual and socio-economic variables, the effect of special instruction, and predicted academic success in young children. The investigators hypothesized that significant differences in perceptual abilities exist between groups as to: I Socio-economic experience; II Special instruction; and III Sex.

A sample of 184 children were selected from the University Laboratory School and two public elementary schools. The sample from the Laboratory School was composed of children from the Nursery, Kindergarten, and First Grades. Half of the Nursery group were given special body-orientation instruction. The remaining children from the two public schools represented a comparatively socio-economically disadvantaged group of first grade children. Approximately half of these disadvantaged children were Negroes.

All of the children were given the Rod and Frame Test and the Frostig Test of Visual Perception. For analyzing the data, the sample was divided as to grade levels, sex, treatment, socio-economically advantage and race. The analysis of variance and Pearson Product-moment correlation techniques were then employed.

The results indicate that socio-economically advantaged children perform more effectively on selected perceptual tasks; that racial background is probably not a significant factor in determining a child's

perceptual ability; that selected body-orientation exercises significantly enhance particular perceptual abilities in young children; and finally, more apparent than the differences between perceptual abilities by sex are the sex differences noted in the relationships between particular perceptual variables and academic performance.

A P P E N D I X C

A Sample of
The Letter Sent
To The Directors
of
Graduate Research Program

EASTERN KENTUCKY UNIVERSITY

Richmond, Kentucky 40475

COLLEGE OF EDUCATION
Department of Education

June 21, 1967

Dear

As you know our institution has been awarded a U.S. Government Grant to continue its Undergraduate Research Training Program. This summer we welcomed ten new trainees. Since I have been privileged to both direct and teach in the program, I have in the short period of only two weeks become well acquainted with my students. I am delighted to say that I feel they are all exceptionally promising people. I felt it may be of interest to you that each of these young people fully intends to enter graduate school following his undergraduate study. Because of their abilities and intentions it seemed to me that an early announcement of their eligibility might be both helpful to you as well as them.

I have enclosed a list of the trainees names and university addresses for your convenience should you desire to contact them personally.

I will be most happy to supply you with what additional information you may require concerning these people.

Respectfully yours,



Newell T. Gill

Director
Undergraduate Research
Training Program
College of Education

NTG/vsb

Enclosures: 1) Announcement
2) New Trainees

NAME AND ADDRESS OF STUDENTAREA OF SPECIAL INTEREST

Joseph Moesker

1997 Columbia Road
Loveland, OhioCurriculum
(Secondary; English and
Mathematics)

Thomas Herdtner

128 Holly Lane
Mason, OhioChild Development
Personnel Services

Karen Sue Lawson

4316 Cornell Road
Cincinnati, OhioEducational Psychology
Child Development

Billie Jo Burness

Triangle Trailer Court
Radcliff, KentuckyEducational Psychology
Child Development

Carrie Ann Barker

Box 34
Majestic, Kentucky 41547Educational Psychology
(Secondary; English)

Judith Hamilton

1111 Elkin Avenue
Albany, IndianaRemedial Reading
Special Education (Elementary)
Personnel Services
(Handicapped Children)

Rebecca Spurr

3727 Carol Road
Louisville, Kentucky 40218Personnel Services
(Elementary Guidance Counseling)
Remedial Reading

Carolyn Dunbar

317 Boiling Springs Drive
Lexington, KentuckyPersonnel Services (Handicapped)
Child Development

Roy King

P. O. Box 551
Richmond, Kentucky 40475

Educational Psychology

Ronnie Wilburn

1006 Race Street
Richmond, Kentucky

Educational Psychology

A P P E N D I X D

Sample of Letters

Received By

Students

UNIVERSITY OF PITTSBURGH

July 10, 1967

Mr. Joseph Moesker
1997 Columbia Road
Loveland, Ohio

Dear Mr. Moesker:

The purpose of this letter is to acquaint you briefly with the graduate training programs in Educational Research available at this institution.

In addition to the Research Specialist Program (brochure enclosed) we also offer a Ph.D. program in Educational Research. The doctoral program permits a student to concentrate in either statistics and experimental design, measurement, or curriculum evaluation. Student support for the Ph.D. program is available through graduate student assistantships offered by the School of Education and the Learning Research and Development Center. Stipend rates for these assistantships are \$1,050 per trimester (\$3,150 annually) plus tuition.

We would be happy to consider an application from you for either of our two graduate programs. I should, however, point out that we have no deadline for applications and are already accepting students for the academic year beginning September, 1968.

I am looking forward to hearing from you. If you have any questions pertaining to the above mentioned matters, please do not hesitate to contact me. With best wishes for your success

Sincerely,

Henry Hausdorff
Chairman
Program of Studies in
Educational Research

HH/lcs

Enclosure

cc: Dr. Newell T. Gill

THE UNIVERSITY OF GEORGIA

COLLEGE OF EDUCATION
ATHENS, GEORGIA 30601

August 4, 1967

DIVISION OF GRADUATE STUDIES

Miss Billie Jo Burness.
Triangle Trailer Court
Radcliff, Kentucky

Dear Miss Burness:

Your name has been referred to me by Dr. Newell T. Gill, Director of the Undergraduate Research Training Program at Eastern Kentucky University. According to Dr. Gill, your area of special interest is Educational Psychology and Child Development.

This letter is to let you know that the College of Education, University of Georgia, offers specialized graduate research training programs in over thirty different fields and that, at this time, we have graduate research training programs supported by USOE funds in nine different programs for qualified educational researchers.

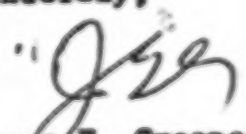
We would be most happy to receive from you an application for admission to the Graduate School and an application for an assistantship for Fall 1968. The appropriate forms are enclosed.

Competitive assistantships and fellowships at the doctoral level require the Graduate Record Examination. It is therefore suggested that you plan to take the GRE in the fall, in order that GRE results may be available for consideration in mid-winter when selections are made for Fall 1968 assistantships and fellowships.

In order that we may consolidate and review your file, it is requested that you have your application, transcripts and credentials sent to this office rather than to the Dean of the Graduate School, as noted on the application form.

The above comments are made on the assumption that our present allotment of fellowships will be continued for the Academic year 1968-69. If they are continued and if you are interested in and prospectively eligible for one of these appointments we would like to hear from you. We will appreciate your interest in the University of Georgia.

Sincerely,


James E. Greene, Chairman
Division of Graduate Studies

JEG:cs

A P P E N D I X E

Sample of Letters

Sent to Director

In Response

to

Information Given

EMORY UNIVERSITY
ATLANTA, GEORGIA 30322

DEPARTMENT OF PSYCHOLOGY

September 27, 1967

Dr. Newell T. Gill, Director,
Undergraduate Research Training,
College of Education,
Eastern Kentucky University,
Richmond, Kentucky 40475

Dear Dr. Gill:

Again, thank you for writing this past June about your incoming students. I am now back from the summer in Michigan, somewhat settled (the settling has been hairy, as they are completely remodeling the second floor of the psychology building, where my office is, and I work in the middle of plasterers, tile layers, wall-knocker-outers, and so on).

I am attaching 11 copies (one for your file) of the general Psychology Department Brochure, which includes a description of the Educational Psychology Doctoral Program; and a mimeo description of the program, which covers it in more detail. I'll appreciate your giving one of each to each of the 10 students, and passing along to them the information that I will be glad to correspond in detail with them about their plans for next year. It is none too soon, as you know, to be thinking about the fall of 1968.

We have admitted 6 full-time doctoral candidates this fall, averaging in the mid-90s on both the V and Q GRE scores, with good psychology backgrounds and very high morale, at least to date (and amidst the confusion, as our classrooms are also located in this madhouse, this is probably an exceptionally good sign).

The brochure and description are from last year, but there is no important change.

I hope your students appreciate what you are doing for them. We are certainly grateful for what you are doing for us in this recruitment respect.

Most warmly,

Boyd R. McCandless

Boyd R. McCandless, Ph.D.
Director, Educational Psychology

BRMcC:jf

GEORGE PEABODY COLLEGE FOR TEACHERS

NASHVILLE, TENNESSEE 37203

THE JOHN F. KENNEDY CENTER FOR RESEARCH ON EDUCATION AND HUMAN DEVELOPMENT

INSTITUTE ON SCHOOL, LEARNING
AND INDIVIDUAL DIFFERENCES

August 29, 1967

TELEPHONE 219, 220, 12-40
EXTENSION 219

Dr. Howell T. Gill
Director
Undergraduate Research
Training Program
College of Education
Eastern Kentucky University
Richmond, Kentucky 40473

Dear Dr. Gill:

I want to thank you for the roster of research trainees you provided last June. I have sent literature on Peabody's program to each of the individuals you named and am hopeful that one or more will be interested in making application for admission to our doctoral program of studies.

If your travels should bring you to Nashville and you should have an opportunity to come by Peabody College, I would like to let you know more about our program of research training here. At the same time, I will look for opportunities to visit Eastern Kentucky to meet you and some of the students who anticipate further graduate work.

Sincerely,


Raymond C. Norris
Director

RCH/ah

THE UNIVERSITY OF MICHIGAN
ANN ARBOR
SCHOOL OF EDUCATION

July 18, 1967

Dr. Newell T. Gill
Department of Education
Eastern Kentucky University
Richmond, Kentucky 40475

Dear Dr. Gill:

Your letter describing the qualities of the new trainees in Eastern Kentucky's Undergraduate Research Training Program has been received. You are fortunate to have been able to corral such a fine group.

Enclosed you'll find copies of a flyer which outlines our program. You might give one to each of your students. If any of them become interested in Michigan I'd be glad to correspond with them.

Sincerely yours,

W. R. Dixon
W. Robert Dixon, Chairman
Department of
Educational Psychology

P.S. None of us received funds for a second generation of the fellowships. If such is the case next year we'll be unable to consider additional applicants. Hopefully we'll know by January 1, 1968.

WRD:ss

Encl. (11)

SCHOOL OF EDUCATION
CORNELL UNIVERSITY
ITHACA, N. Y. 14850

July 3, 1967

Professor Newell T. Gill
Director
Undergraduate Research
Training Program
College of Education
Eastern Kentucky University
Richmond, Kentucky 40475

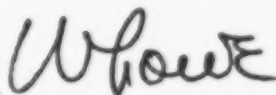
Dear Professor Gill:

Dean Johnson has asked me to reply to your interesting correspondence of June 21.

I am sending a copy of our catalog and a description of our Title IV Program which may be of interest to your students. We would be pleased to react to any questions or comments.

We wish you well in your endeavor.

Sincerely,



William T. Lowe
Associate Professor

WTL:vw

cc: Dean Johnson

HARVARD UNIVERSITY
GRADUATE SCHOOL OF EDUCATION

LONGFELLOW HALL, APPIAN WAY
CAMBRIDGE, MASSACHUSETTS 02138

July 3, 1967

Professor Newell T. Gill
College of Education
Eastern Kentucky University
Richmond, Kentucky 40475

Dear Professor Gill:

Thank you very much for your kind letter of June 21 and the information about your Undergraduate Research Training Program. I am delighted to know that you have ten very promising new trainees. Certainly we and the other graduate schools around the country will be very interested in informing you of our programs with the hope that one or more of these people might wish to apply for eventual admission to doctorate study.

I am enclosing a statement based on our application to the USOE for a graduate research training program. This is essentially the pattern we are now following. Possibly your students will wish to examine it with some interest and consider whether or not they would like to make application to us. Generally we prefer people to have had one to three years of teaching experience before they come into further graduate study, although a few exceptions are made. Your students should know that application for admission here are considered during January. If, therefore, any of them have serious interest in us, they should get the application forms in the autumn so that all papers can be completed before our January activity.

If students have particular questions about our program, we would be delighted to hear from them. Thank you for your kindness in sending us information.

Sincerely yours,

Fletcher Watson

Fletcher G. Watson
Professor of Education

FGW:sk
Enclosure

Professor Newell T. Gill
College of Education
Eastern Kentucky University
Richmond, Kentucky 40475

BOSTON COLLEGE
SCHOOL OF EDUCATION
CHESTNUT HILL, MASSACHUSETTS 02167

OFFICE OF EDUCATIONAL RESEARCH

June 30, 1967

Dr. Newell T. Gill, Director
Undergraduate Research Training Program
College of Education
Eastern Kentucky University
Richmond, Kentucky 40475

Dear Dr. Gill:

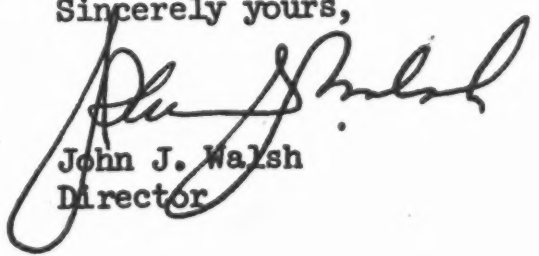
I am very grateful to you for your thoughtfulness in calling to my attention the caliber of the students currently enrolled in your educational research training program. I certainly hope that at least some of our fellowships for the 1968-69 academic year can be awarded to graduates of Title IV undergraduate programs.

A supply of the brochure which describes our graduate-level program is enclosed, and I would appreciate it if you would be kind enough to distribute these to your students.

We would be able to notify students of their acceptability for Title IV Fellowships almost as soon as the necessary documents and test scores are furnished. The data for students in our program at the present time show an average GRE score (V + M) of approximately 1300, and an average Miller Analogies Test score of 75. We have not accepted anyone with a combined GRE below 1200, or an MAT below 65.

I trust that we will have the opportunity of enrolling some of your graduates next year.

Sincerely yours,


John J. Walsh
Director

JJW/nab

Enclosures

STANFORD UNIVERSITY
STANFORD, CALIFORNIA 94305

SCHOOL OF EDUCATION

July 10, 1967

Dr. Newell T. Gill
Director
Undergraduate Research
Training Program
College of Education
Eastern Kentucky University
Richmond, Kentucky 40475

Dear Dr. Gill:

Thank you very much for sending us your list of students interested in graduate training in educational research. We are in the process of preparing our new brochure for 1968-69. We will be happy to send one to each of your students just as soon as it is ready, with a short note encouraging them to apply.

We will also send you a supply of brochures to distribute to interested persons.

We appreciate your interest in our program.

Sincerely,

Kellet Min
Kellet Min
Administrative Assistant
Research Traineeship Program

KM:jh

A P P E N D I X F

STUDENT EVALUATION

OF THE

U.R.T.P.

Summer 1966

STUDENT EVALUATION OF THE U.R.T.P.

The following is a summary of the evaluations of the U.R.T.P. solicited from the trainees after completing the summer program. It was the opinion of the faculty involved that such criticism would be useful in planning for a more effective program in the spring. The students were instructed not to put their names on the critique form. It was felt that in this way the students would feel less inhibited in expressing their true feelings.

SUMMARY OF STUDENT EVALUATION

First Requirement: The trainees were asked to rate the following statement on a seven point scale as to whether they strongly agreed (1), or strongly disagreed (7).

"I feel I have benefited intellectually through my association with this program."

Of the sixteen students who participated, only one marked four (4), four students marked three (3), eight students marked two (2), and three students marked (1).

Second Requirement: The trainees were next to complete the following statement:

"The thing I liked most about this program was . . ."

In evaluating the responses, the examiners read carefully each completion, taking note of the frequency of the specific experience or experiences discussed. The results can be seen below.

EVALUATION OF FAVORABLE EXPERIENCES

FAVORABLE EXPERIENCE	FREQUENCY WITH WHICH IT WAS MENTIONED
1. Helpful, relaxed atmosphere	six
2. Field trips	six
3. Freedom and independence	five
4. Individual research projects	four
5. Group relations	three
6. New experiences	three
7. visiting speakers	one

It should be noted that quite often a student listed more than one favorable experience.

Third Requirement: The trainees were asked to complete a statement designed to clarify possible weaknesses in the program. The following completion statement was used for this purpose:

"I feel I would have benefited much more from the program if . . . "

The method of analyzing the previous responses was employed in this evaluation. The results are given below.

EVALUATION OF UNFAVORABLE EXPERIENCES

UNFAVORABLE EXPERIENCE	FREQUENCY WITH WHICH IT WAS MENTIONED
1. General organization was ambiguous.	six
2. Fundamentals and statistics course: Poor communication between teacher and student.	six
3. Statistics Course: Too much pressure, too fast a pace.	four
4. I.B.M. Card Punching was over-done.	two
5. Not enough time.	two
6. Programmed text (Statistics).	two

Fourth Requirement: The question was raised by the staff as to the student's perceptions of the amount of effort he had put forth in the interest of the program. To investigate this question, the trainees were instructed to examine the three statements listed below and check the one which best applied to their situation.

STATEMENT ONE: "I studied as much as I feel I should have most of the eight weeks."

STATEMENT TWO: "I only studied as much as I feel I should have the last couple of weeks."

STATEMENT THREE: "I never really put much effort into the program."

The results indicated that of the sixteen students, none checked the last statement, only three checked the second statement and thirteen checked the first statement.

Ample space for further comment was provided at the bottom of the critique. Because it was felt that many of the responses were quite revealing as to the nature of both the problems and the benefits of the program, they have been included under the title of: "Additional Comments by the Students Concerning the U.R.T.P."

ADDITIONAL COMMENTS BY STUDENTS
CONCERNING THE U.S.T.P.

STUDENT NO. 1:

The last three weeks, after we found out there would be a statistics final, I put much more work into statistics than I did the previous four weeks. However the first four weeks I concentrated on the independent research into the Montessori Method.

This spring I hope what we are to accomplish will be explained the first week and we can receive advice on the completion of our research project.

STUDENT NO. 2:

I don't think I realized just how much good can come from this program until we visited the children. If just one of us could do something to help these children, then I think that the work would be priceless. I had no idea of the conditions that confront these children but their desire to learn and some attitude change was evident.

STUDENT NO. 3:

This is the most exciting experience and opportunity that I have had in the field of education.

STUDENT NO. 4:

As a whole, for a beginner, I feel this summer program went real well. Most of us would have enjoyed it more, however, if we hadn't been made to feel we had been lost in the shuffle in fundamentals class. Most of the time things either weren't explained or were explained over our heads.

STUDENT NO. 5:

I plan to do a lot of work through intersession as well as when I am doing my student teaching. I have worked as hard as I have had the time to do but I have needed to do more. I don't feel as if I am capable of doing research at the time. I could have been doing something more rewarding than having a class two hours every other day and being taught by other students or from a book.

STUDENT NO. 6:

I think the program will prosper in the future, due to us learning from our unorganized mistakes.

A definite schedule of meetings needs to be set up if possible.

Also, is there a way that the programs in the future could finish up in the summer instead of the spring? We will be ready to push the panic button with 30 hours a week, two of these courses, a paper to write, and 6 additional hours to graduate.

I think the major thing to be improvised on -- would be the statistics class. On the whole, other than this I have really enjoyed this summer and the teachers. It has helped me become more responsible toward my studies.

STUDENT NO. 7:

Had you asked which part of the program I felt to be the most valuable, I would say that it was the special area work. Here, we not only were able to apply what we had read, but also to learn the way I think is best -- by doing

STUDENT NO. 8:

Should know a little about how a card or a program is set up, but I do not feel it was necessary for us to waste time on this. Knowing how to punch a card is not really necessary for our purposes.

When the term first began we were told that we were to read in our area to find out what we might like to use as our project. This was fine for the first week or two, but I haven't had a chance to do any reading since then. We had our statistics class with three or more hours a night to put in on it. We were expected to work up here every afternoon. We were in class or meetings every morning. We still were expected to do this outside work. When? Did any of you think of that?

This is what I mean by a lack of unified direction. We were never allowed to develop, but were constantly being pulled in different directions at the same time.

STUDENT NO. 9:

The program was not a program of great intellectual benefit as such, but I rate it so because it's the first real challenge in my three years of college. For this, I am grateful.

STUDENT NO. 10:

(No additional comments)

STUDENT NO. 11:

About the research program itself: I feel that it is a most worthy course and was well done from the standpoint of both students and staff. This realistic thought does remain: I am asking myself "what did I learn?", and replying "not much". I also realize that spacious beaches are made of minute grains of sand.

STUDENT NO. 12:

After I.B.M. Key Punch has been learned adequately, eliminate the 2 hours per week. It did nothing more than take up time.

Throw away both texts used for the Fundamentals class. I have no doubt much better ones can be found.

In my experience, students having little familiarity with statistics cannot learn it effectively from a programmed text. Get a good text book. Make sure students have plenty of application for what they learn. Let student vote on how they want to be evaluated -- weekly quizzes, periodic tests, class participation or one final -- or perhaps a combination of these.

Speakers we had were welcomed and were all very worthwhile.

Program in the beginning had a lack of co-ordination which was understandable but should be eliminated for the next group.

There were a couple of times during the last few weeks (those weeks of panic) that I honestly wished I had never heard of U.R.T.P. Everything is behind me now -- and with a clear head, I can say I appreciate the opportunities given to me through this program, and am proud to be involved with it.

If Eastern stays with this program, I do believe a way to get a very effective program for the next group coming in is to let us either orally revise the first or have our hand in its organization.

STUDENT NO. 13:

This program thus far has been a great experience. I have enjoyed every phase of it. The professors we had could not have been better and on that end I would have made no changes. The students could have worked harder but other than that it was a wonderful summer only much too short!

STUDENT NO. 14:

Perhaps if there was more motivation from within instead of this feeling of insecurity, I may have gotten more from the program than I actually did. I often felt that I was reaching as high as I could and there wasn't anything to be grasped. Much was carried on before I knew what was to have been already known.

STUDENT NO. 15:

If I had had a better background in math, a course in more basic statistics would have helped. The programmed book was too advanced for just beginning or I was unusually dense. Could be! I didn't feel that the book was the best in explaining the methods of research. There were too many anecdotes and not enough concrete explanations.

Daily assignments at the end of the statistics lessons should have been gone over in class and the problems explained. They were worded differently than the text and I for one was lost in trying to do them.

STUDENT NO. 16:

The beginning of the program was the most productive for me because I was involved in something I enjoyed, looking for research and working with the different aspects. If this phase of the program would have been more productive. The program as a whole was not as disappointing to me as I have gathered it was for some of the others. Besides the disappointment in the one class, I feel the greatest disappointment was the lack of participation and contributions from a group of supposedly honor students. This was entirely too evident and I am sure a disappointment to the instructor in fundamentals class. This was the most disappointing item of the program and I feel a twinge of guilt because I didn't speak up and out

against certain disagreeable items, especially to the person on whom the decision fell. There was too much complaining to others rather than the one responsible.